MARYLAND
Department of Health

Public Health Preparedness and Situational Awareness Report: #2018:52

Reporting for the week ending 12/29/18 (MMWR Week #52)

January 4, 2018

CURRENT HOMELAND SECURITY THREAT LEVELS
National: **No Active Alerts**
Maryland: **Normal (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2018.

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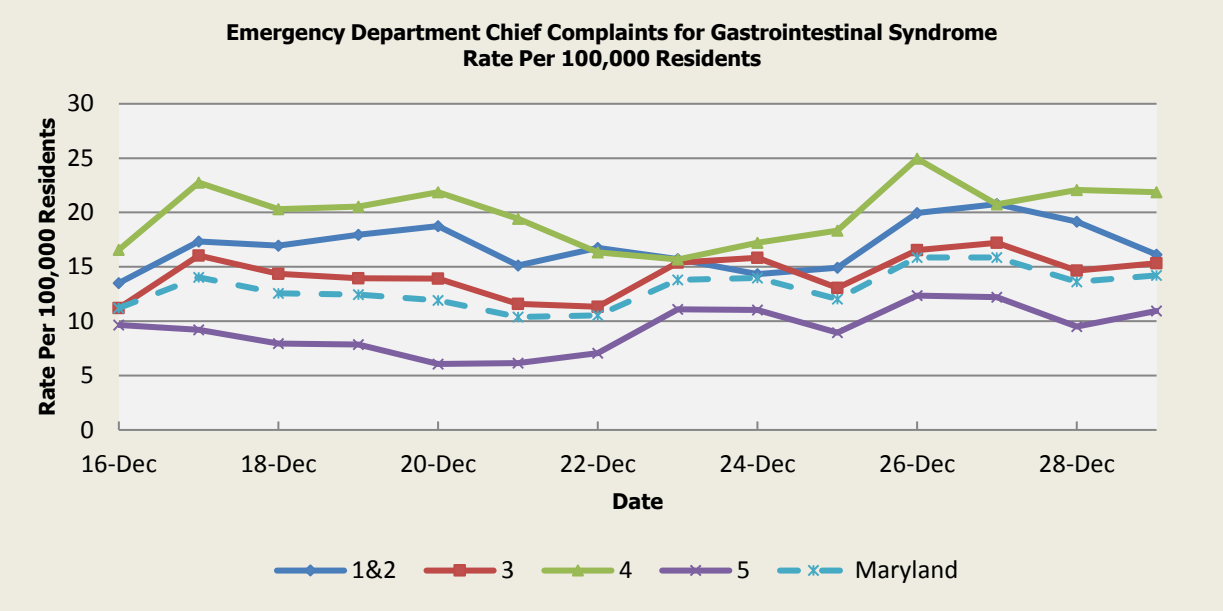
Gastrointestinal Syndrome



There were two (2) Gastrointestinal Syndrome outbreaks reported this week: two (2) outbreaks of Gastroenteritis in Nursing Homes (Regions 3,4).

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	13.07	15.03	15.74	10.15	13.05
Median Rate*	12.91	14.80	15.24	10.04	12.93

** Per 100,000 Residents*

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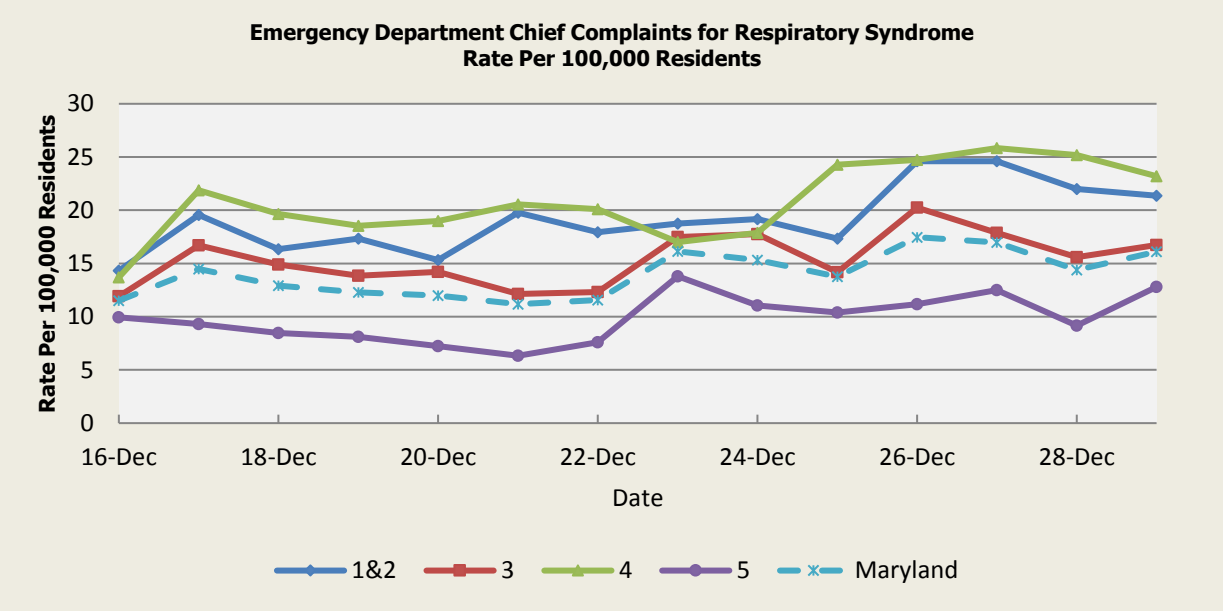
Respiratory Syndrome



There were no Respiratory Syndrome outbreaks reported this week.

	Respiratory Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.45	14.60	14.85	9.90	12.64
Median Rate*	12.10	14.03	14.13	9.52	12.16

** Per 100,000 Residents*

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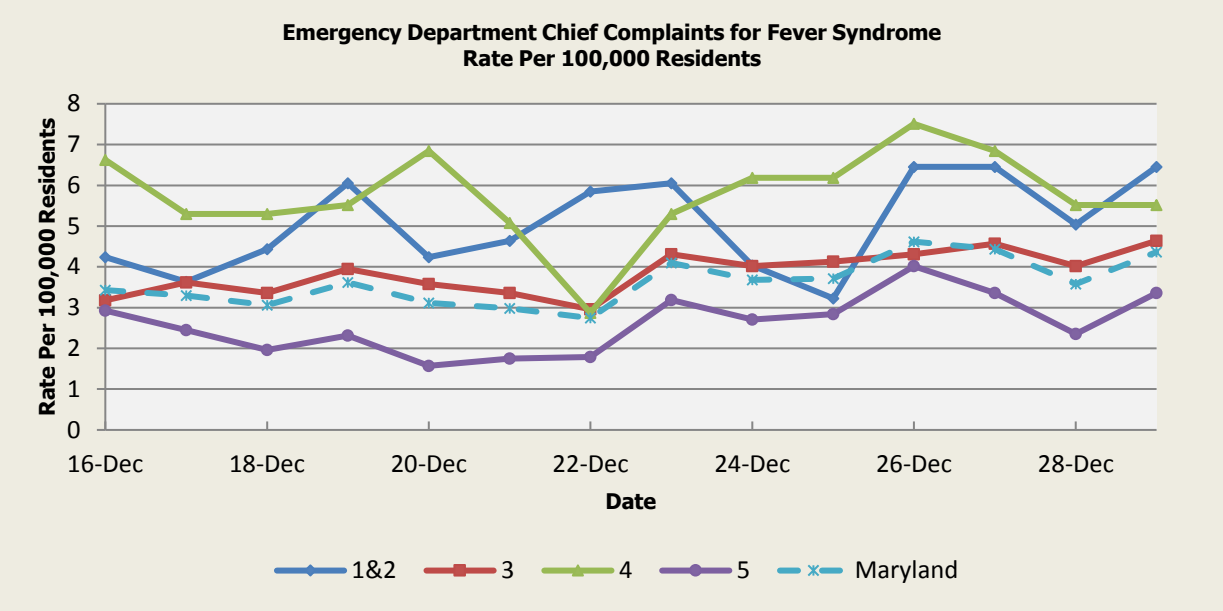
Fever Syndrome



There were no Fever Syndrome outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.01	3.87	4.03	3.02	3.48
Median Rate*	2.82	3.76	3.75	2.92	3.36

**Per 100,000 Residents*

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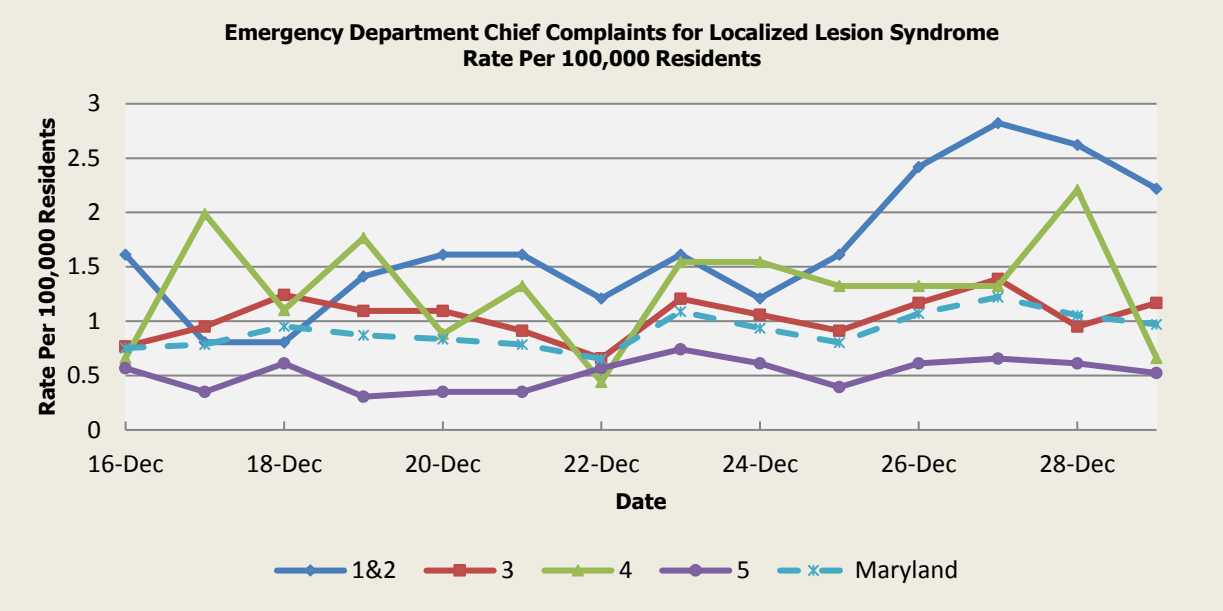
Localized Lesion Syndrome



There were no Localized Lesion Syndrome outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.08	1.82	2.05	0.92	1.43
Median Rate*	1.01	1.75	1.99	0.87	1.37

** Per 100,000 Residents*

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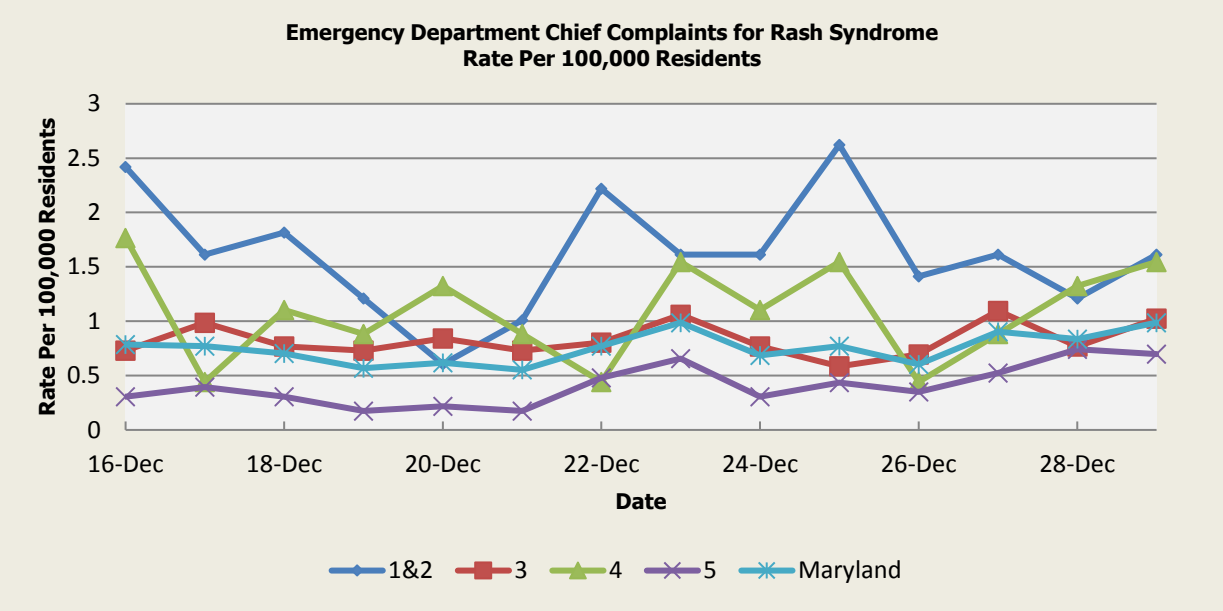
Rash Syndrome



There were no Rash Syndrome outbreaks reported this week.

	Rash Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.22	1.70	1.77	0.99	1.39
Median Rate*	1.21	1.61	1.77	0.96	1.34

** Per 100,000 Residents*

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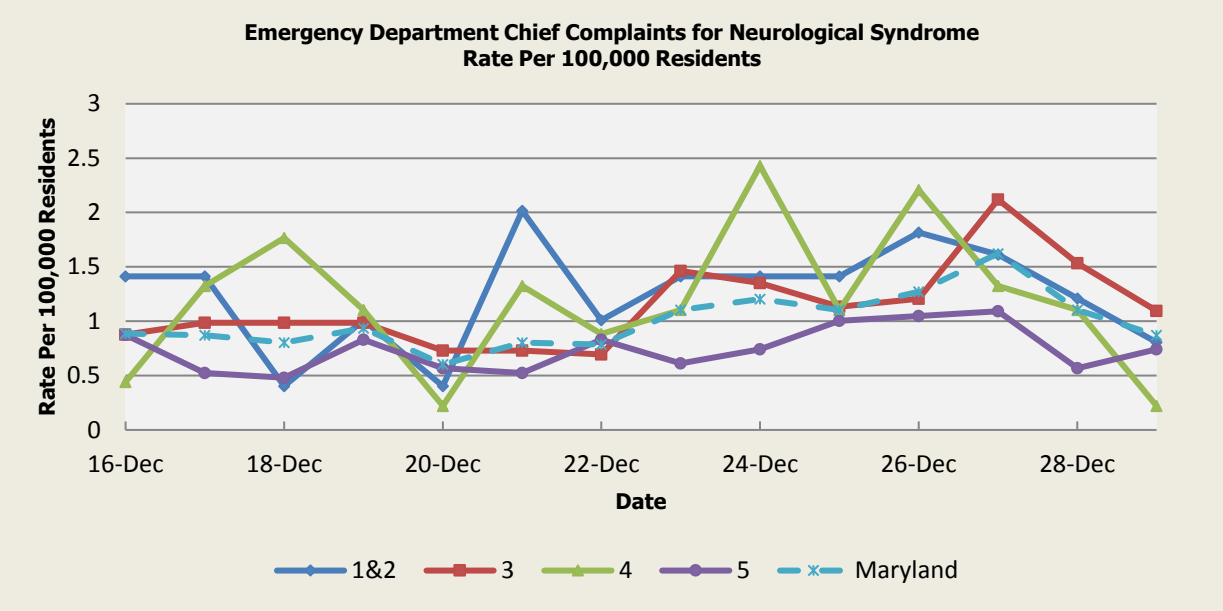
Neurological Syndrome



There were no Neurological Syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.74	0.91	0.82	0.57	0.76
Median Rate*	0.60	0.80	0.66	0.52	0.67

** Per 100,000 Residents*

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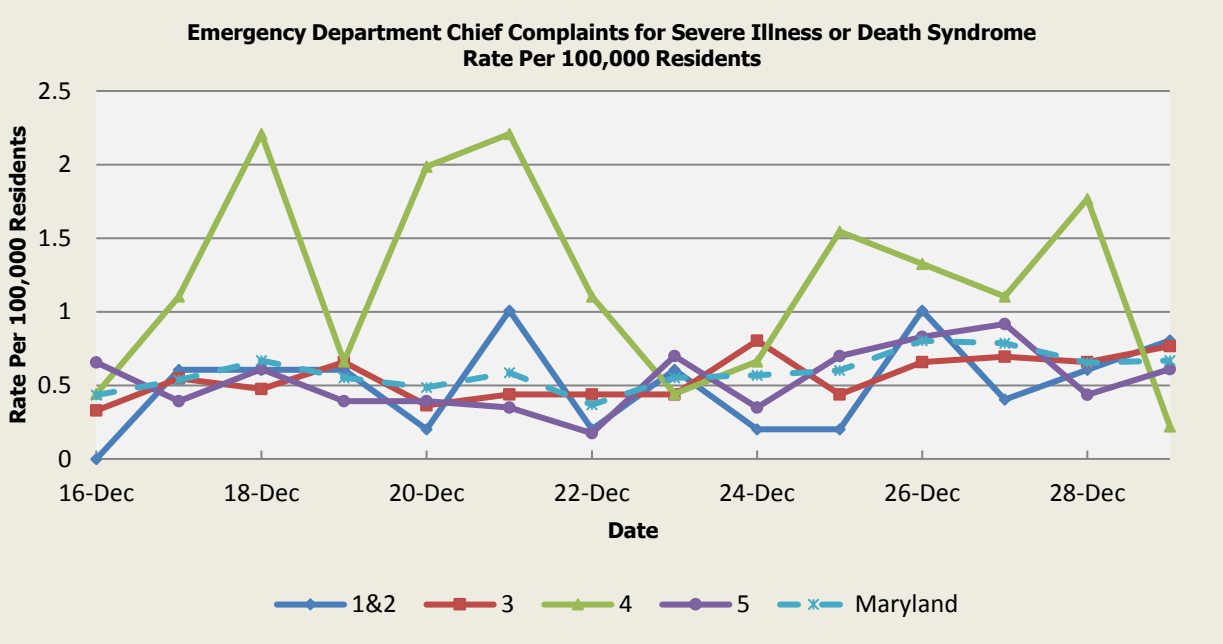
Severe Illness or Death Syndrome



There were no Severe Illness or Death Syndrome outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.66	0.91	0.83	0.50	0.72
Median Rate*	0.60	0.88	0.66	0.48	0.69

** Per 100,000 Residents*

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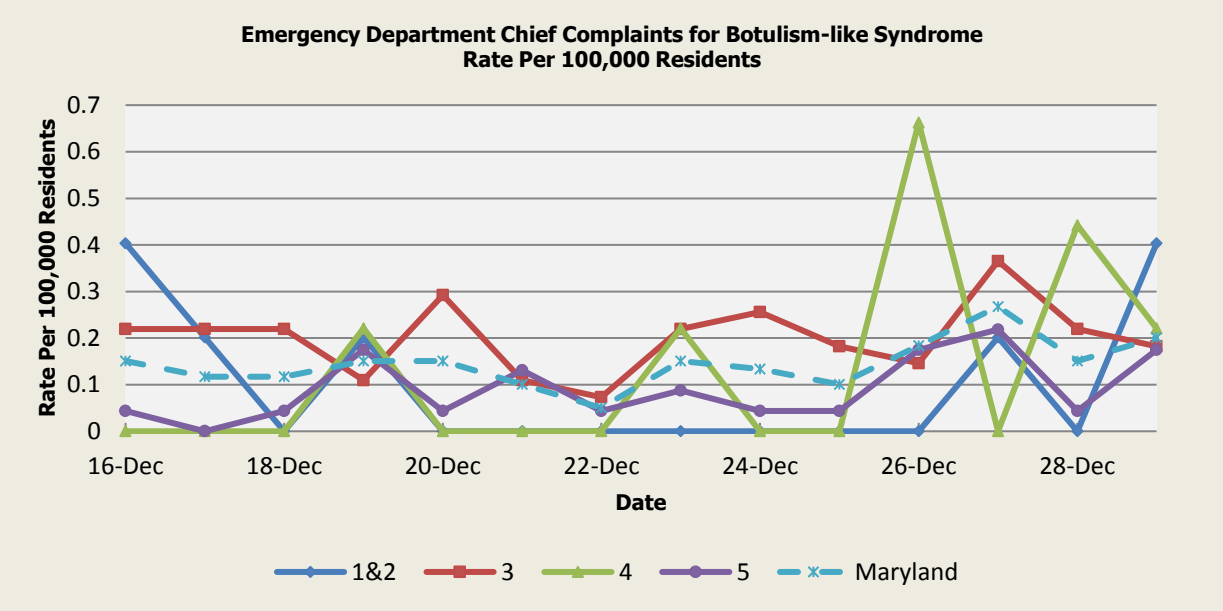
SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 12/16 (Regions 1&2), 12/17 (Regions 1&2), 12/19 (Regions 1&2,4,5), 12/23 (Region 4), 12/24 (Region 3), 12/26 (Regions 4,5), 12/27 (Regions 1&2,4,5), 12/28 (Region 4), 12/29 (Regions 1&2,4,5), 12/20 (Region 3). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present				
Health Region	0.07	0.11	0.05	0.07	0.09
Mean Rate*	0.07	0.11	0.05	0.07	0.09
Median Rate*	0.00	0.07	0.00	0.04	0.07

** Per 100,000 Residents*

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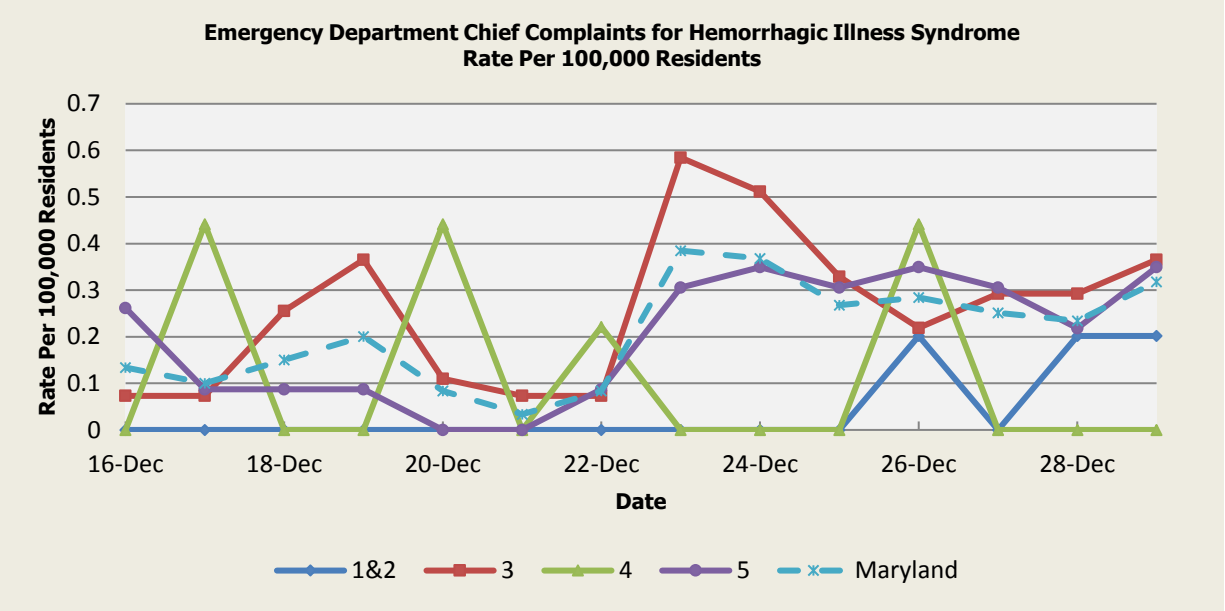
Hemorrhagic Illness Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 12/17 (Regions 4,5), 12/19 (Region 3), 12/20 (Region 4), 12/22 (Region 4), 12/23 (Regions 3,5), 12/24 (Region 5), 12/25 (Regions 3,5), 12/26 (Regions 1&2,4,5), 12/27 (Region 5), 12/28 (Regions 1&2), 12/29 (Regions 1&2,3,5). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.15	0.03	0.11	0.12
Median Rate*	0.00	0.07	0.00	0.04	0.07

** Per 100,000 Residents*

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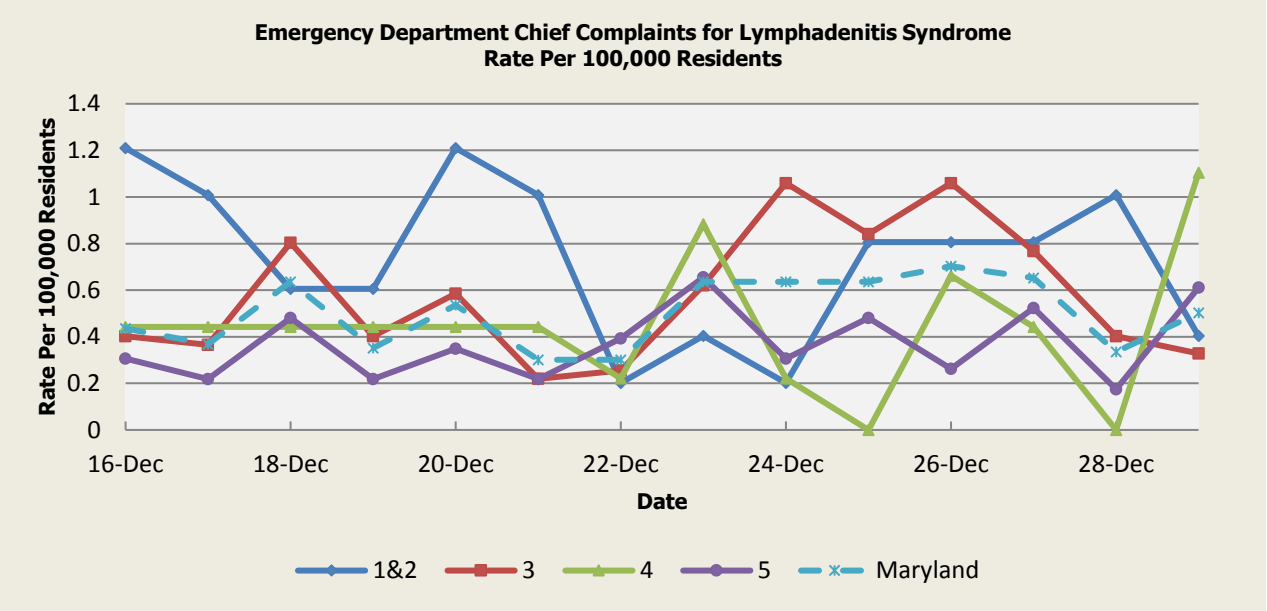
Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 12/16 (Regions 1&2), 12/17 (Regions 1&2), 12/20 (Regions 1&2), 12/21 (Regions 1&2), 12/23 (Region 4), 12/25 (Regions 1&2), 12/26 (Regions 1&2), 12/27 (Regions 1&2), 12/28 (Regions 1&2), 12/29 (Region 4). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.34	0.57	0.39	0.36	0.46
Median Rate*	0.20	0.47	0.44	0.31	0.38

** Per 100,000 Residents*

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MARYLAND REPORTABLE DISEASE SURVEILLANCE

Reportable disease data from the National Electronic Disease Surveillance System (NEDSS) that feeds into ESSENCE is currently being validated. We will include these data in future reports once the validation process is complete.

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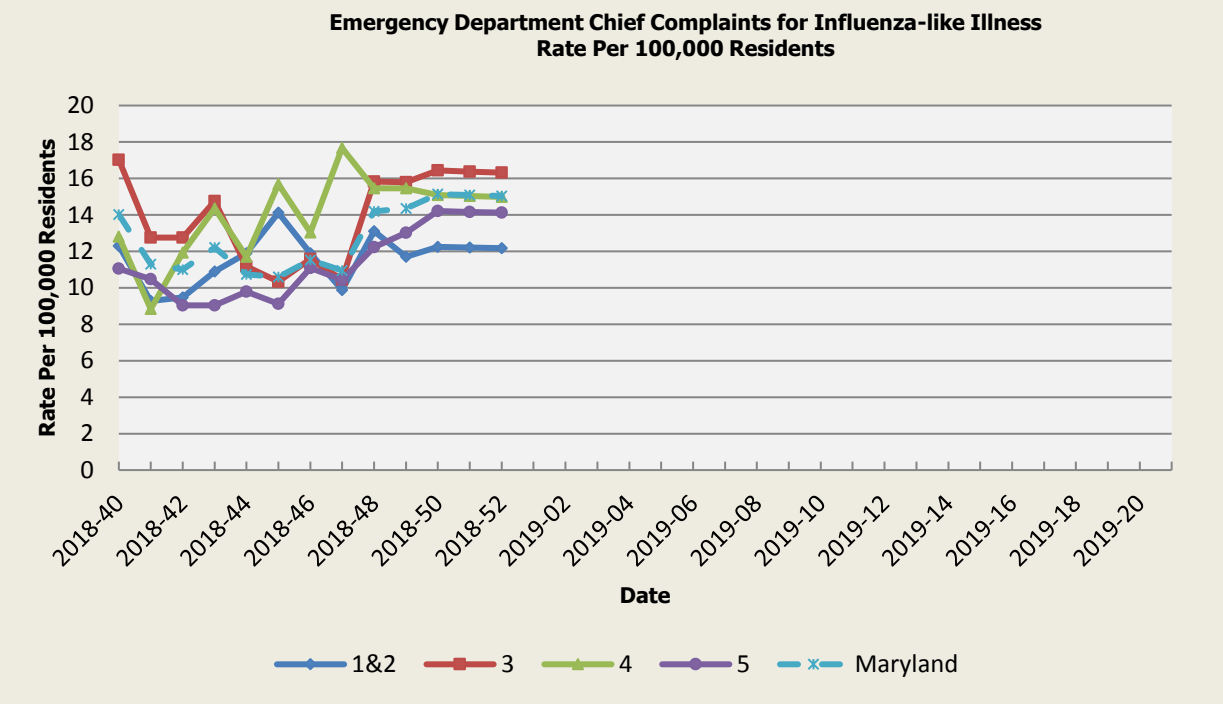
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019). Seasonal Influenza activity for Week 52 was: High Intensity.

Influenza-like Illness



	Influenza-like Illness Baseline Data Week 1 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.25	16.43	15.08	14.21	15.13
Median Rate*	7.66	9.65	9.05	8.45	8.99

** Per 100,000 Residents*

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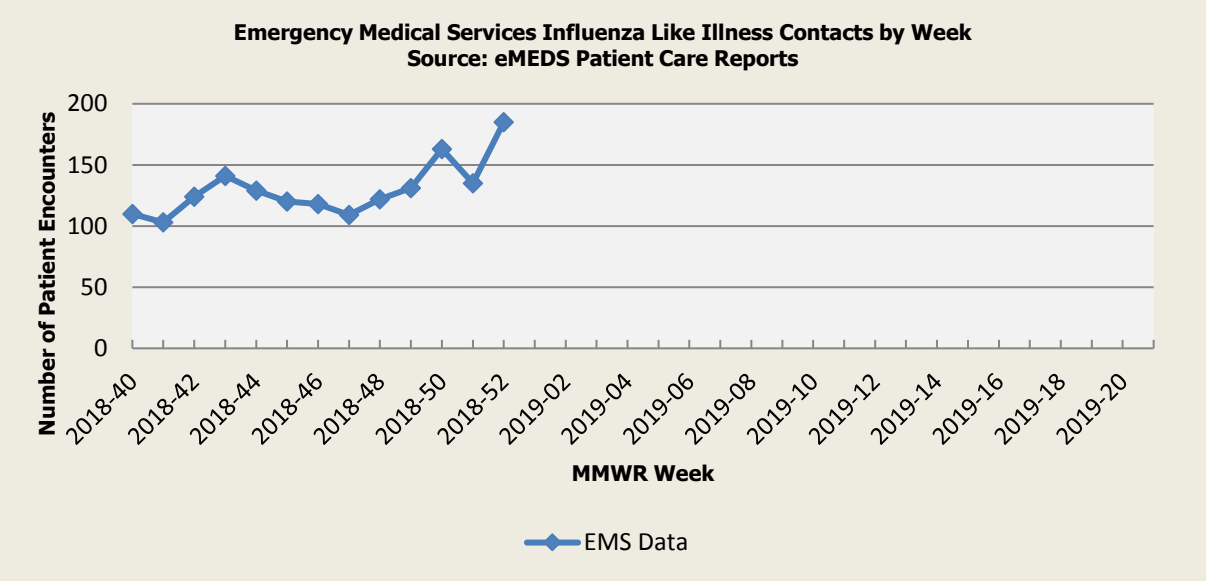
Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

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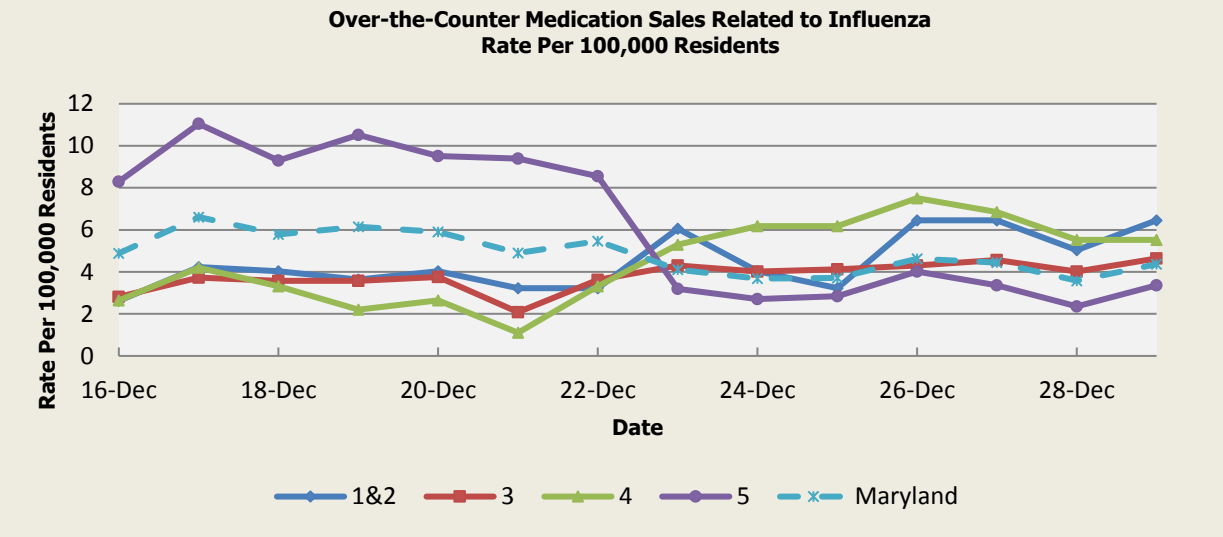
Over-the-Counter Influenza-Related Medication Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	OTC Medication Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.62	4.69	2.75	8.09	5.76
Median Rate*	3.02	3.95	2.43	7.47	5.09

** Per 100,000 Residents*

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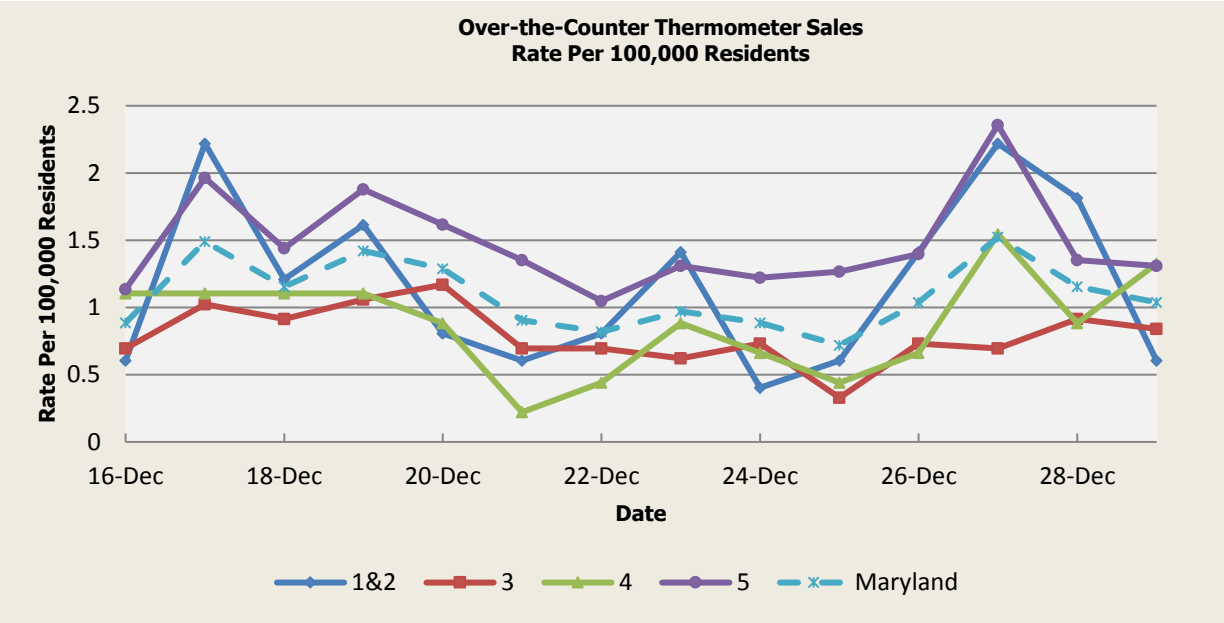
Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.13	2.99	2.36	3.98	3.33
Median Rate*	2.82	2.81	2.21	3.80	3.18

** Per 100,000 Residents*

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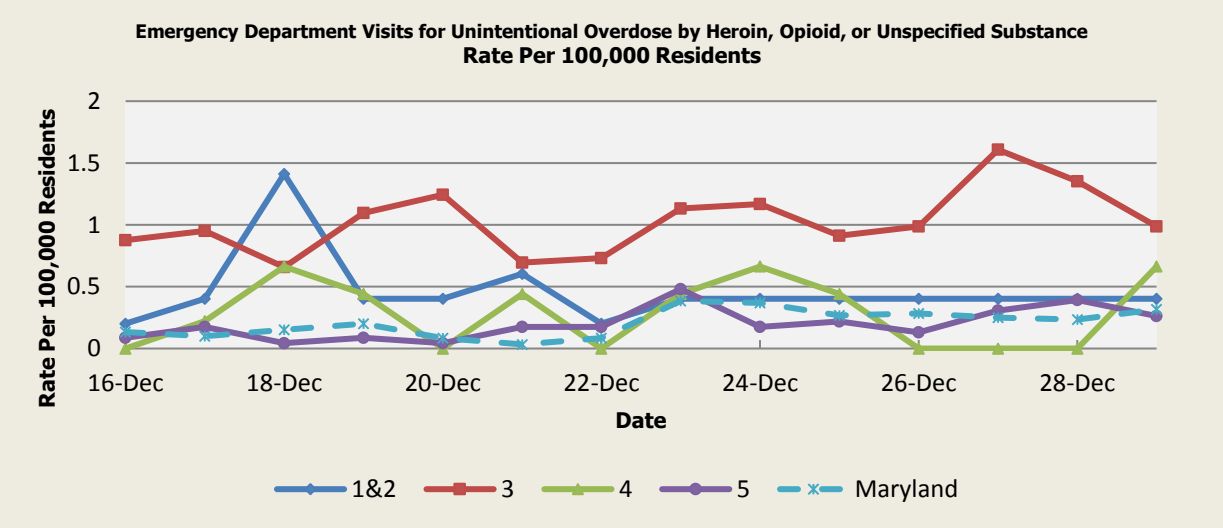
SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

Unintentional Overdose by Heroin, Opioid, or Unspecified Substance



Disclaimer on ESSENCE Overdose related data: ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

	Non-fatal Overdose ED Visit Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.28	0.36	0.32	0.13	0.26
Median Rate*	1.01	1.32	1.10	0.48	0.99

** Per 100,000 Residents*

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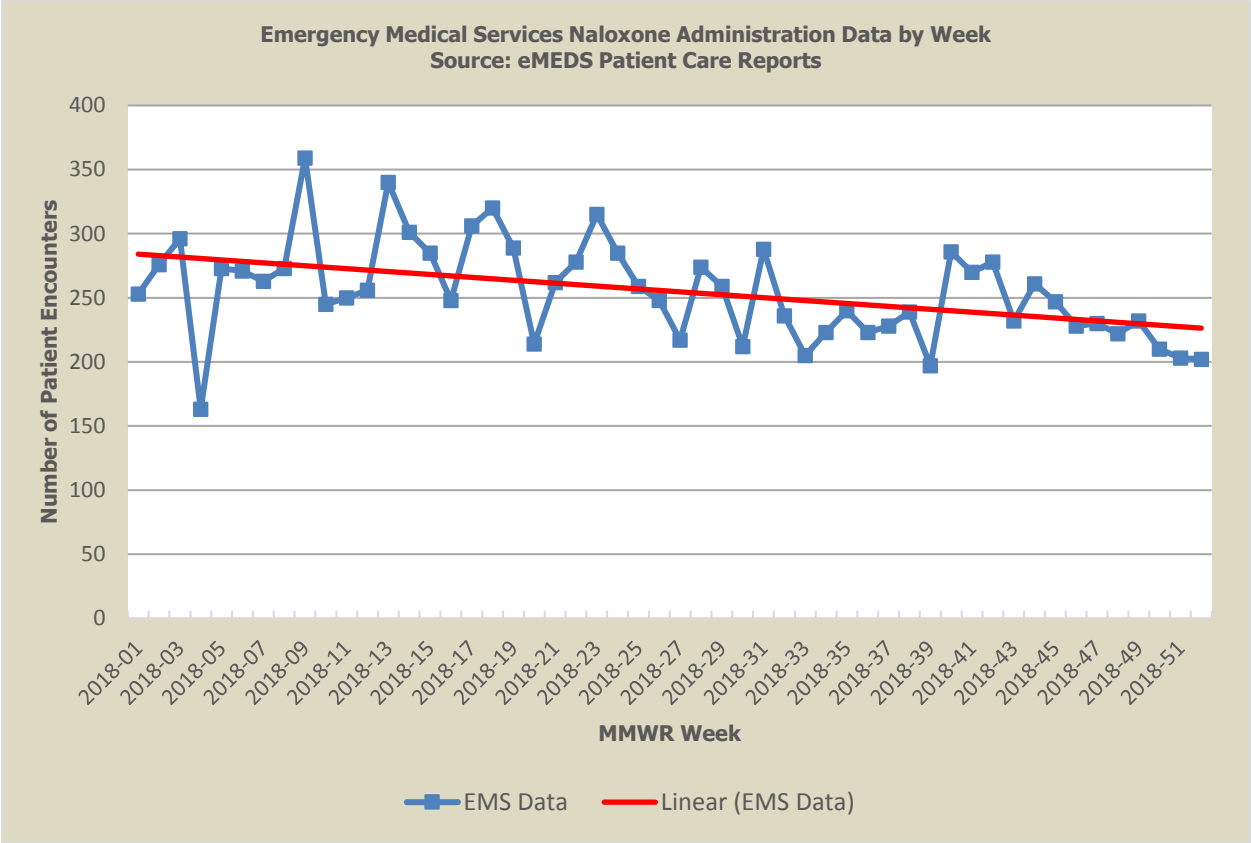
Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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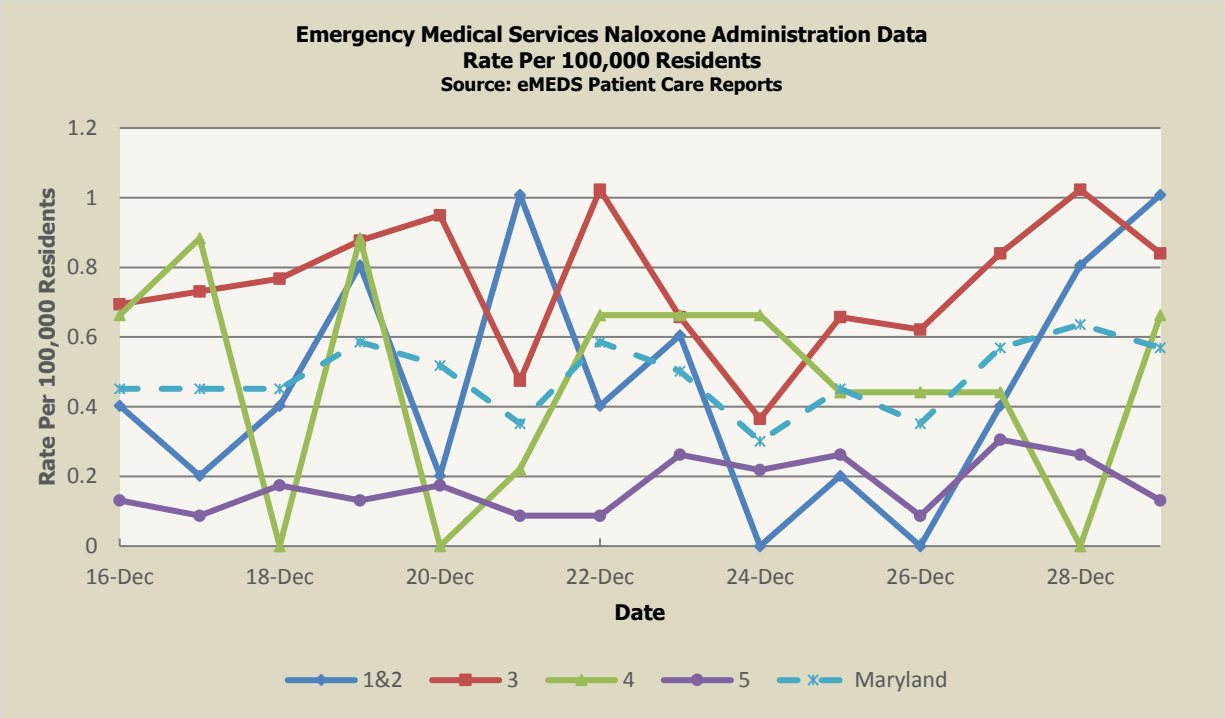
Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

	EMS Naloxone Administration Data Baseline Data January 1, 2017 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.28	0.36	0.32	0.13	0.26
Median Rate*	1.01	1.32	1.10	0.48	0.99

** Per 100,000 Residents*

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PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 3, 2018, the WHO-confirmed global total (2003-2018) of human cases of H5N1 avian influenza virus infection stands at 860, of which 454 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

There were no relevant avian influenza reports this week.

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week.

NATIONAL DISEASE REPORTS

There were no relevant national disease reports this week.

INTERNATIONAL DISEASE REPORTS

LASSA FEVER (WEST AFRICA), 28 Dec 2018, Minister of health Benjamin Hounkpatin confirmed on 26 Dec 2018, 4 new cases of Lassa haemorrhagic fever in Benin, including one in Cotonou. This occurred in the period from 15-26 Dec 2018. In the case of Cotonou, a 28-year-old (has been infected). His case was detected on 24 Dec 2018, but his illness commenced the previous week. He had a fever, a cough, a cold, and fatigue. Due to the persistence of the cough and cold, and with the appearance of traces of blood in nasal discharge on 24 Dec 2018, the alert was given. The patient was placed in isolation on 25 Dec 2018, and on the morning of 26 Dec

2018, his result from the laboratory came back positive [for Lassa fever]. Subsequently, the patient was isolated and put on treatment. Read More: http://www.promedmail.org/post/6225335

LISTERIOSIS (NORWAY), 28 Dec 2018, Officials with the Norwegian Institute of Public Health report seeing an increase in listeriosis cases in December [2018], prompting a warning for high-risk groups. According to an official notice Friday [21 Dec 2018] (computer translated), 6 cases were reported this month [December 2018] when the country typically sees 1-2 cases a month. Four of the 6 patients reported in December [2018] are from Hedmark and Oppland. Health officials are working to identify if there is a common food source linked to the increase in cases. Read More: http://www.promedmail.org/post/6226705

AFRICAN SWINE FEVER (CHINA), 27 Dec 2018, African swine fever [ASF] has spread to several southern Chinese provinces, with severe and swift outbreaks that have led to the culling of scores of pigs in a country that is considered to be the world's largest consumer and producer of pork. The disease was first detected in the northernmost regions of China in early August [2018]. The virus has now spread to Guangzhou City in Guangdong Province -- the southernmost province on the mainland. Read More: http://www.promedmail.org/post/6224887

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.health.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.health.maryland.gov

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County